	•
Lingar	
000	CRF Errors Corrected by the STIC Systems Branch  ORF Processing Date 1/10/2001
Sorba	Changed a file from non-ASCII to ASCII ENTERED Vorified by: (STIC s
	Changed the margins in cases where the sequence text was "wrapped" down to the next line.
	Edited a format error in the Current Application Data section, specifically:
	Edited the Current Application Data section with the actual current number. The number inputted by the applicant was   The prior application data; or other
	Added the mandatory heading and subheadings for *Current Application Data*.
	Edited the 'Number of Sequences' field. The applicant spelled out a number instead of using an integer.
	Changed the spelling of a mandatory field (the headings or subheadings), specifically:
	Corrected the SEO ID NO when obviously incorrect. The sequence numbers that were edited were:
	Inserted or corrected a nucleic number at the end of a nucleic line. SEO ID NO's edited:
	Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
	Inserted colons after headings/subheadings. Headings edited included:•,
	Defeted extra, invalid, headings-used by an applicant, specifically:
	Deletod: non-ASCII "garbago" at the beginning/end of files: secretary initials/filename at end of file page numbers throughout text; other invalid loxt, such as
	Inserted mandatory headings, specifically:
	Corrected an obvious erro: in the response, specifically:
	Edited identifiers where upper case is used but lower case is required, or vice versa.
	Corrected an error in the Number of Sequences field, specifically:
	A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
	Deleted ending stop codon in amino acid sequences and adjusted the *(A)Length: field accordingly (error due to a Patentin bug). Sequences corrected:
	Other:
7	·,
_	in the first Office

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

RAW SEQUENCE LISTING

PATENT APPLICATION: US/08/482,402A TIME: 16:06:27

DATE: 09/10/2001

Input Set : A:\Pto.amc

Output Set: N:\CRF3\09102001\H482402A.raw

3 <110> APPLICANT: Rapoport, Basil 5 <120> TITLE OF INVENTION: DISEASE ASSOCIATED HUMAN AUTOANTIBODIES SPECIFIC FOR HUMAN THYROID PEROXIDASE 6 8 <130> FILE REFERENCE: A1697DIV3 10 <140> CURRENT APPLICATION NUMBER: 08/482,402A 11 <141> CURRENT FILING DATE: 1996-06-07 13 <150> PRIOR APPLICATION NUMBER: US 08/196,082 14 <151> PRIOR FILING DATE: 1994-03-03 16 <150> PRIOR APPLICATION NUMBER: US 08/182,117 17 <151> PRIOR FILING DATE: 1994-01-27 19 <150> PRIOR APPLICATION NUMBER: PCT/US92/07381 20 <151> PRIOR FILING DATE: 1992-08-28 22 <150> PRIOR APPLICATION NUMBER: PCT/US92/06283 23 <151> PRIOR FILING DATE: 1992-07-30 25 <150> PRIOR APPLICATION NUMBER: US 07/750,579 26 <151> PRIOR FILING DATE: 1991-08-28 28 <150> PRIOR APPLICATION NUMBER: US 07/738,040 29 <151> PRIOR FILING DATE: 1991-07-30 31 <150> PRIOR APPLICATION NUMBER: US 07/559,955 32 <151> PRIOR FILING DATE: 1990-07-31 34 <150> PRIOR APPLICATION NUMBER: US 07/472,070 35 <151> PRIOR FILING DATE: 1990-01-30 37 <150> PRIOR APPLICATION NUMBER: US 07/388,044 38 <151> PRIOR FILING DATE: 1989-07-31 40 <160> NUMBER OF SEQ ID NOS: 12 42 <170> SOFTWARE: PatentIn version 3.1 44 <210> SEQ ID NO: 1 45 <211> LENGTH: 104 46 <212> TYPE: DNA 47 <213> ORGANISM: Homo sapiens 49 <400> SEQUENCE: 1 50 aggeteecte gggtgaettg gateteeatg tegetggetg etetgetgat egaggeteee 60 52 togggtgact tgaattccca tgtagctggc tgctctgctg atcg 104 55 <210> SEQ ID NO: 2 56 <211> LENGTH: 3072 57 <212> TYPE: DNA 58 <213> ORGANISM: Homo sapiens 60 <220> FEATURE: 61 <221> NAME/KEY: CDS 62 <222> LOCATION: (85)..(2883) 63 <223> OTHER INFORMATION: 66 <400> SEQUENCE: 2 67 gaggcaattg aggcgcccat ttcagaagag ttacagccgt gaaaattact cagcagtgca 60 69 gttggctgag aagaggaaaa aaga atg aga gcg ctg gct gtg ctg tct gtc 111

Met Arg Ala Leu Ala Val Leu Ser Val

73 acg ctg gtt atg gcc tgc aca gaa gcc ttc ttc ccc ttc atc tcg aga

70

71

159

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74 75	Thr 10	Leu	Val	Met	Ala	Cys 15	Thr	Glu	Ala	Phe	Phe 20	Pro	Phe	Ile	Ser	Arg 25	
77	ggg	aaa	qaa	ctc	ctt	tgg	qqa	aaq	cct	qaq	qaq	tct	cqt	qtc	tct	aqc	207
	Gly																
79	1				30	•	- 4	1 -		35			5		40		
81	gtc	tta	gag	qaa	agc	aaq	cac	cta	ata	qac	acc	qcc	atq	tac	acc	acq	255
	Val																
83	,			45		-1-			50					55			
	atg	caq	aga	aac	ctc	aaq	aaa	aσa	qqa	atc	ctt	tct	qqa	act	caq	ctt	303
	Met	_	-			_		_						_	-		
87			60			-1-		65	1				70				
	ctg	tct		tcc	aaa	ctt	cct		cca	aca	agc	gga	ata	att	acc	cga	351
	Leu										_				_	_	
91		75			-1-		80					85				5	
	gca		σασ	ata	atσ	σаа		t.ca	ata	caa	aca		aaa	aga	aaa	atc	399
	Ala																
95						95				<b>V</b>	100		-1-	5	-1-	105	
	aac	cta	aaa	act	caa		t.ca	caq	cat	сса			act	t.t.a	t.ca		447
	Asn																
99			-1-		110					115					120		
	gat	cto	rata	ι ασα		att	αca	aac	ato		. aaa	t.at	cto	: cct		atg	495
																Met	
103	_			125					130			01.		135	-		
		CCC	. cca			e cca	aac	act			r acc	r aad	a aaa			g ccc	543
	_				_				-	-						, Pro	
107			140	_	, 01.			145	_				150	_			
		aca			t.ac	e aac	aac			cac	e dec	. aσa	t.ac	aa a	e acc	tcc	591
				-	_			-	_			_			_	Ser	
111		155	_		1-		160		, <u>-</u>			165	_				
				: ctc	r acs	а сда			e aat	. cca	ato	tat	. gad	r dad	a a a	ttc	639
		_	-	-	_	_					_			_		7 Phe	
	170					175	_				180	_				185	
			r ccc	: caa	ι σσο			cac	a a a	tto			aac	a a a	ı tto	cca	687
																Pro	
119					190	_			1	195		1-		,	200		
		ccc	d dag	ato			ato	aca	a a a	cat	ato	att	. caa	att		aat	735
																Asn	
123				205	_	,			210					215			
		att	ato			gat	gac	cac	: tat	tct	. gac	cto	cto	rato	a aca	ı tgg	783
		_	_		_	-	-	_			-		_	-	-	Trp	
127			220		1			225			1		230			<b>L</b>	
		caa			gad	cac	gac	ato	qe	rtto	aca	ı cca	a cac	r ago	aco	agc	831
																Ser	
131	_	235	_		_		240					245					
		act	acc	tto	gad	ı qqa	qqq	tct	gad	t t q c	cac	ato	act	: ťat	gad	g aac	879
																. Asn	_
	250				1	255	_			1	260					265	
			cca	tat	: ttt			caa	cto	ccc			ggc	cqc	g ccc	gcc	927
																Āla	
				-										-			

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139					270					275					280		
141	gcg	ggc	acc	gcc	tgt	ctg	ccc	ttc	tac	cgc	tct	tcg	gcc	gcc	tgc	ggc	975
142	Ala	Gly	Thr	Ala	Cys	Leu	Pro	Phe	Tyr	Arg	Ser	Ser	Ala	Ala	Cýs	Gly	
143				285					290					295			
	acc																1023
	Thr	Gly		Gln	Gly	Ala	Leu		Gly	Asn	Leu	Ser		Ala	Asn	Pro	
147			300					305					310				1071
	agg																1071
	Arg		Gin	мет	Asn	GTĀ	ьеи 320	Thr	ser	Pne	ьeu	_	Ата	ser	Thr	vaı	
151	tat	315	200	+00	000	~~~		~~~	200	a24	ata	325	220	+~~	3.00	aat	1119
	Tyr		_		_	-				_	_					-	1119
	330	Gry	261	Ser	FIO	335	пец	Giu	AIG	GIII	340	Arg	ASII	115	1111	345	
	gcc	αаа	aaa	cta	ctc		atc	cac	aac	cac		caa	gac	tac	aac		1167
	Ala	_		_		_	-			_			-			_	110,
159		0	0-1		350	9			~- <i>1</i>	355		9	-1.0 <sub>F</sub>		360	5	
	gcc	tac	ctq	ccc		ata	ccq	cca	cqc	qcq	cct	qcq	qcc	tqt		ccc	1215
	Āla																
163		-		365					370					375			
165	gag	ccc	ggc	aac	ccc	gga	gag	acc	cgc	ggg	ccc	tgc	ttc	ctg	gcc	gga	1263
166	Glu	${\tt Pro}$	Gly	Asn	Pro	Gly	Glu	Thr	Arg	Gly	Pro	Cys	Phe	Leu	Ala	Gly	
167			380					385					390				
	gac																1311
	Asp	_	Arg	Ala	Ser	Glu		Pro	Ser	Leu	Thr		Leu	His	Thr	Leu	
171		395					400					405					
	tgg																1359
	Trp	Leu	Arg	GLU	Hls		Arg	Leu	Ата	Ата		Leu	rys	АІа	Leu		
	410	<b>63.6</b>	+ ~ ~	200	~~~	415	~~~	~+~	+	a2.a	420	~~~	222	224	a+ a	425	1407
	gcg Ala																1407
179	Ата	1113	ттр	261	430	vab	AIG	va.	1 Y 1	435	GLU	пта	лгу	цуз	440	Vai	
	ggc	act.	cta	cac		atc	at.c	acc	ct.a		σat.	tac	at.c	ccc		atc	1455
	Gly	_	_		_				-		-						
183	1			445					450	5				455			
	ctg	gga	ccc	gag	gcc	ttc	cag	cag	tac	gtg	ggt	ccc	tat	gaa	ggc	tat	1503
186	Leu	Gly	Pro	Glu	Ala	Phe	Gln	Gln	Tyr	Val	Gly	Pro	Tyr	Glu	Gly	Tyr	
187			460					465					470				
	gac																1551
	Asp		Thr	Ala	Asn	Pro		Val	Ser	Asn	Val		Ser	Thr	Ala	Ala	
191		475					480					485					
	ttc	-				-	-			_	_				_	-	1599
	Phe	Arg	Phe	Gly	His		Thr	Ile	His	Pro		Val	Arg	Arg	Leu	-	
	490	200	++-		~~~	495	000	~~~	a+ ~	000	500	a+ ~	+~~	a+~	000	505	1647
	gcc Ala																1647
198	MIG	ser.	File	GTII	510	птр	P10	Asp	ьеи	515	стА	ьец	ттЬ	ьеи	520	GIII	
	gct	ttc	ttc	age		taa	aca	tta	ctc		ana	aat	aat	ttσ		cca	1695
	Ala																1093
203				525	0				530	9	~±1	~±1	~-1	535			

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PATENT APPLICATION: US/08/482,402A TIME: 16:06:27

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	cta Leu		-				-	_		_		_	_		_	-	1743
	cag Gln																1791
214	tcc Ser 570																1839
	cac His																1887
	cgc Arg	-				-	-	-	_		-		_	_		_	1935
	gtg Val	_	_	_		_	_			_			-			-	1983
	gtc Val																2031
234	ggg Gly 650		_		_	_				_	_	-	_	_	_		2079
	gac Asp		_							-		_		_	_	_	2127
	cag Gln																2175
	aac Asn																2223
	ttc Phe		_	_				-	-	_				_		-	2271
254	gag Glu 730	_			-					_	-	_	_				2319
	gag Glu																2367
	cgc Arg		-		Tyr		_										2415
	gag Glu																2463
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RAW SEQUENCE LISTING DATE: 09/10/2001 PATENT APPLICATION: US/08/482,402A TIME: 16:06:27

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						Arg											2333
	810	261	AIG	лгу	Cys	815	MSII	1111	цуз	GIY	820	riie	GIII	Cys	пец	825	
		~~~		+	~~~		~~-	~-~	~~+	~~~			+	~+-	~~~		2607
		-				tta		-	-		_		-	_	-		2607
	Ата	Asp	Pro	Tyr		Leu	GTA	Asp	Asp		Arg	Thr	Cys	vaı	_	ser	
279					830					835					840		
						gtg											2655
	Gly	Arg	Leu		Arg	Val	Thr	Trp		Ser	Met	Ser	Leu		Ala	Leu	
283				845					850					855			
						gca											2703
286	Leu	Ile	Gly	Gly	Phe	Ala	Gly	Leu	Thr	Ser	Thr	Val	Ile	Cys	Arg	Trp	
287			860					865					870			•	
289	aca	cgc	act	ggc	act	aaa	tcc	aca	ctg	ccc	atc	tcg	gag	aca	ggc	gga	2751
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291		875					880					885					
293	qqa	act	ccc	qaq	ctq	aga	tqc	qqa	aaq	cac	caq	qcc	qta	qqq	acc	tca	2799
						Arg											
	890					895	4	2			900					905	
		caq	caa	acc	gca	gct	càσ	gac	tea	ααα		gag	agt	act	aaa		2847
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299	110	0111	n. g	niu	910	niu	OIII	MSP	DCI	915	OIII	Ora	DCI	niu	920	ncc	
	<b>(122</b>	aac	oaa	ra+	-	cac	aaa	ata	000		aaa	ata	+ = =	raaa:			2893
											ycc		Lyay	gggc	aaa		2093
つへつ	$\alpha$	C 1 **	7 ~~~	7 ~~	mh ~	IIia	7 ~~	T 011	Dro	7 ~~	ת 1 ת	T OIL					
	Glu	Gly	Arg	_	Thr	His	Arg	Leu		Arg	Ala	Leu					
303		_	-	925			-		930	_			_4		4- 4- 1		2052
303 305	gtg	gcag	gac a	925 actgo	cagaa	ac aç	gette	catgt	930 tc	ccaaa	aatc	accg		_		tccaa	2953
303 305 307	gtgg	gcago caggo	gac a	925 actgo atcgo	cagaa gaaat	ac ag	getto geago	catgt gacga	930 : tcc : ctc	ccaaa gttti	aatc tccc	acco	acgg	jta a	aatct	tagtac	3013
303 305 307 309	gtgg acad catg	gcago caggo gtcgt	gac a caa a	925 actgo atcgo ctact	cagaa gaaat	ac ag	getto geago	catgt gacga	930 : tcc : ctc	ccaaa gttti	aatc tccc	acco	acgg	jta a	aatct		
303 305 307 309 312	gtgg acad catg	gcagg caggg gtcgt )> SI	gac a caa a cag t EQ II	925 actgo atcgo tact	cagaa gaaat cctca : 3	ac ag	getto geago	catgt gacga	930 : tcc : ctc	ccaaa gttti	aatc tccc	acco	acgg	jta a	aatct	tagtac	3013
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303 305 307 309 312 313 314	gtgg acac catg <210 <211	gcagg caggg gtcgt )> SI L> LI 2> TY	gac a caa a cag t EQ II ENGTI	925 actgo atcgo tact NO: H: 93	cagaa gaaat cctca : 3 33	ac ag tc ag	getto geago catgo	catgt gacga gatga	930 : tcc : ctc	ccaaa gttti	aatc tccc	acco	acgg	jta a	aatct	tagtac	3013
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303 305 307 309 312 313 314 315 317	gtgg acac <210 <211 <213 <400	gcagg caggo gtcgt )> SI l> LI 2> TY 3> OI	gac a caa a cag t EQ II ENGTH (PE: RGAN)	925 actgo atcgo ttact NO: H: 93 PRT ISM:	cagaa gaaat cctca : 3 33 Homo	ac ag tc ag	gette geage catge	catgi gacga gatga	930 E too a cto a ata	ccaaa gttti aaatg	aatc tccc ytta	acce aaca tage	acggo	gta a	aatct aaaaa	agtac aaaaa	3013
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VERIFICATION SUMMARY

PATENT APPLICATION: US/08/482,402A

DATE: 09/10/2001

TIME: 16:06:28

Input Set : A:\Pto.amc

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RAW SEQUENCE LISTING DATE: 08/29/2001 PATENT APPLICATION: US/08/482,402A TIME: 14:17:39

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Does Not Comply Corrected Diskette Needs

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     11 <141> CURRENT FILING DATE: 1996-06-07
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Input Set : A:\ES.txt

٠	270 271	Cys	Lys 795	Asp	Val	Asn	Glu	Cys 800	Ala	Asp	Gly	Ala	His 805	Pro	Pro	Cys	His	
	273	gcc	tct	gcg	agg	tgc	aga	aac	acc	aaa	qqc	qqc	ttc	cag	tqt	ctc	tac	2559
														Gln				
		810			_	-	815			•	-	820			-1-		825	
	277	qcq	gac	ccc	tac	gag	tta	qqa	gac	gat	aaa	aσa	acc	tgc	αt.a	gac		2607
	278	Ālā	Āsp	Pro	Tvr	Ğlu	Leu	Glv	Asp	Asp	Glv	Ara	Thr	Cys	Val	Asp	Ser	2007
	279		-		-	830		-	•		835	,		-1-		840	552	
	281	aaa	agg	ctc	cct	caa	ata	act	taa	atc	tcc	at.σ	t.ca	ctg	act		cta	2655
	282	Gly	Arq	Leu	Pro	Arg	Val	Thr	Tro	Ile	Ser	Met	Ser	Leu	Ala	Ala	Len	2055
	283	_			845	,			•	850					855			
		ctq	atc	qqa	aac	ttc	qca	aat	ctc		t.ca	acσ	ata	att		aαα	taa	2703
	286	Leu	Ile	Gly	Ğĺv	Phe	Ala	Glv	Leu	Thr	Ser	Thr	Val	Ile	Cvs	Ara	Tro	2703
	287			860				1	865					870	0,10			
	289	aca	cqc	act	aac	act	aaa	tcc		cta	ccc	atc	t.ca	gag	aca	aac	σσα	2751
														Glu				2,31
	291		875		1		-1-	880					885	014		011	011	
	293	qqa	act	ccc	gag	cta	aσa		σσα	aaσ	cac	caq		gta	aaa	acc	tca	2799
														Val				2173
		890					895	-1-	1	-1-		900		,	011		905	
			caq	caa	qcc	αca		caσ	gac	tea	σασ		σασ	agt	act	ααα		2847
	298	Pro	Gln	Ara	Ala	Ala	Ala	Gln	Asp	Ser	Glu	Gln	Glu	Ser	Δla	Glv	Met	2047
	299			,		910			<u>-</u> -		915	0.2	<b>014</b>	001		920	ncc	
		gaa	aac	caa	σat.		cac	аσσ	cta	cca		acc	ctc	tgag	τσας			2893
			Gly											-yu	99900	auu		2073
	303		1	0	925			3		930	5		204					
	305	atac	rcago	rac a	cta	cagaa	ac ac	actto	cator		ccaaa	atc	acco	rtaco	rac 1	cttt	ttccaa	2953
																	tagtac	3013
																	aaaa	3072
			)> SE				, ,	· · · · · J ,	, , -			,	5					3072
			L> LE															
			2> TY															
			3> OF			Homo	sar	oiens	3									
			)> SE				-											
	319	Met	Arg	Ala	Leu	Ala	Val	Leu	Ser	Val	Thr	Leu	Val	Met	Ala	Cvs	Thr	
	320		-			5					10					15		
	323	Glu	Ala	Phe	Phe	Pro	Phe	Ile	Ser	Arq	Gly	Lvs	Glu	Leu	Leu		Glv	
	324				20					25	-	_			30		<b>1</b>	
	327	Lys	Pro	Glu	Glu	Ser	Arg	Val	Ser	Ser	Val	Leu	Glu	Glu	-	Lvs	Ara	
	328	_		35					40					45		-1-	5	
						Ala	Met	Tyr	Ala	Thr	Met	Gln	Ara	Asn	Leu	Lvs	Lvs	
	332		50	•				55					60			-1-	-10	
		Arg	Gly	Ile	Leu	Ser	Gly	Ala	Gln	Leu	Leu	Ser		Ser	Lvs	Leu	Pro	
	336		_				70					75	_	,	_1 -		80	
			Pro	Thr	Ser	Gly	Val	Ile	Ala	Arg	Ala		Glu	Ile	Met	Glu		
	340					85					90		•			95	<b></b>	
	343	Ser	Ile	Gln	Ala	Met	Lys	Arg	Lys	Val		Leu	Lys	Thr	Gln		Ser	
	344				100		,-	-	-	105			-		110			
	217	Gln	His	Pro	Thr	Asp	Ala	Leu	Ser	Glu	Asp	Leu	Leu	Ser	Ile	Ile	Ala	
	J# /	0111				<u>r</u> -					-							

**VERIFICATION SUMMARY** 

Dill

DATE: 08/29/2001

PATENT APPLICATION: US/08/482,402A

TIME: 14:17:41

Input Set : A:\ES.txt